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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/898,957	07/03/2001	Luc Cremers	522-1748	9739

7590 01/30/2004

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EXAMINER	
PHAN, THAI Q	
ART UNIT	**PAPER NUMBER**
2128	5

DATE MAILED: 01/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/898,957	CREMERS ET AL.	
	Examiner	Art Unit	
	Thai Phan	2128	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 July 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

This Office Action is in response to patent application S/N: 09/898,957. Claims 1-15 are now pending.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

The drawings are object to because Fig. 11 fails to show block detail data and legends.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over US patent no. 6,407,548 B1, issued to Peter Dietz.

As per claim 1, Dietz discloses a method for modeling and designing an optimization of noise transmission over a gradient system with feature limitation very similar to the claimed invention. According to Dietz, the method includes steps:

Simulating wave energy source from monopole, omnidirectional wave energy source at a position remote form a body (Fig. 1, col. 4, lines 55-64),

Computing a boundary oscillation amplitude of the wave generated by the source at the surface of the body (col. 4, line 55 to col. 5, line 24), and

Deriving from the oscillation amplitude the wave transfer function instead of the wave transfer vector as claimed.

Practitioner in the art at the time of the invention was made would have found the transfer function as derived above could imply the claimed transfer vector because the transfer function is derived from the radiated surface body which includes many points and such contributed points would contribute to form the transfer vector as claimed.

As per claims 2-3, Dietz discloses boundary element method as claimed.

As per claim 4, Dietz discloses an acoustic wave source (Summary of the Invention).

As per claims 5 and 6, Dietz discloses transfer function for different frequencies including intermediate frequency as claimed.

As per claim 7, Dietz discloses acoustic transfer function for noise source as claimed by projecting into location coordinates as claimed (Fig. 1).

As per claims 8-12, Dietz discloses such claimed limitation to compute the transfer function from gradient sources.

As per claim 13, Dietz discloses a computer system and method for modeling and designing an optimization of noise transmission over a gradient system with feature limitation very similar to the claimed invention. According to Dietz, the system includes means for performing steps of:

Simulating wave energy source from monopole, omnidirectional wave energy source at a position remote form a body (Fig. 1, col. 4, lines 55-64),

Computing a boundary oscillation amplitude of the wave generated by the source at the surface of the body (col. 4, line 55 to col. 5, line 24), and

Deriving from the oscillation amplitude the wave transfer function instead of the wave transfer vector as claimed.

Practitioner in the art at the time of the invention was made would have found the transfer function as derived above could imply the claimed transfer vector because the transfer function is derived from the radiated surface body which includes many points and such radiated points source on the body surface would directly contribute to the transfer vector as claimed.

As per claims 14-15, Dietz discloses transfer functions for different frequency including the claimed intermediate frequency for various gradient sources (Fig. 1).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Thai Phan whose telephone number is 703-305-3812.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Thai Phan
Jan. 25, 2004

Thai Phan
Thai Phan
Patent Examiner
AU: 2128